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Sent: Thursday, August 10, 2023 7:21 AM
To: Rhine Don (Joey) [REDACTED]; Payan Ruben [REDACTED] Lamm Adrienne [REDACTED]; Garcia Anne [REDACTED]; Beaton Robert [REDACTED]; Scott Gregory [REDACTED]; Shaw Stephanie [REDACTED]
Cc: De Angelis, Vincenzo [REDACTED]
Subject: AAR Issues Proposal for Warm Bearing Trending additions and improvements to S-6001

Hello everyone,
I hope you are all doing well.
You have probably seen this by now, but in case you haven't, I am appending the newest proposal by AAR to add warm bearing trending requirements **over multiple HBDs** (something that wasn't there before) as well as over a time range of 240 hours (10 days) to follow warm bearings in service and remove them based on this new criteria. The proposed revisions are highlighted with the black vertical bar below in new section 4.1.3.

DRAFT 08/

4.0 QUALIFYING INDICATIONS

4.1 WM51

4.1.1 The bearing has a calculated value of $K_t > 3.5$ within the train *and* the bearing has a value of $K_e > 2$ with respect to the equipment *and* the bearing is detected 50 °F hotter than any other bearing on the equipment.

4.1.2 The bearing has a calculated value of $K_t > 3.5$ within the train *and* the second hottest bearing on the equipment has a value of $K_t < 45\%$ of the bearing in question.

4.1.3 A minimum of three (3) HBD passings, where:

- One (1) HBD reading of $K_t \geq 4.0$ and bearing temperature is ≥ 95 degrees Fahrenheit above ambient, and $K_e \geq 2$, and,
- Two separate HBD reads with $K_t \geq 1.5$, and $K_e \geq 2$.

Any of these three (3) events can occur in any order within a rolling window of sixteen (16) consecutive reads within a period not to exceed 240 hours.

I have also attached the entire S-6001 specification to this email, as information.

I believe this comes as a follow-up to our East Palestine hearings, during our interviews where the AAR representative (Mr. Rush) mentioned that they were working on improving and expanding the warm bearing trending rules over multiple detectors.

Well done NTSB! This is a giant step forward.

Best regards,

Abe Aronian, P.Eng, M.Eng.

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